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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,657	11/24/2003	James E. Ingle	10900/007	4640

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EXAMINER

LEE, JONG SUK

ART UNIT	PAPER NUMBER
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3673

DATE MAILED: 10/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/720,657

Applicant(s)

INGLE, JAMES E.

Examiner

Jong-Suk (James) Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-49 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 30-49 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/23/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. The preliminary amendment filed November 24, 2003 has been entered.
2. The amendment filed August 9, 2004 has been entered.

Election/Restriction

3. Applicant's election of Group I directed to claims 30-37 in the reply filed on August 9, 2004 is acknowledged. Other originally canceled claims 1-29 have been canceled. With respect to the newly added claims 38-48, they are considered to be in the Group I.

Specification

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The title should be amended to be commensurate with the claimed invention, i.e., **Jack-up Mobile Marine-Based Offshore Dwelling Units and Jacking Method and Apparatus.**

5. The disclosure is objected to because of the following informalities:

Page 1, 1st paragraph (in the preliminary amendment filed 11/24/2003): -- is a divisional which -- should be inserted after "This application"; and -- filed April 16, 2001, -- should be inserted after "09/835,794" to clarify the status of the present application.

Appropriate correction is required.

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5. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

6. The abstract of the disclosure is objected to because of the phrase, "A new....can reliably handle loads several times greater than can be currently handled, can be inexpensively designed....and can save millions of dollars in the manufacture...." in lines 1-3 referring to the purported merits of speculative applications of the inventions. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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8. Claims 30, 32, 36 and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Gillis (US 4,655,640).

Gillis discloses a jacking system for raising and lowering a working platform comprising of: a supporting leg (12) having at least one leg chord with at least one toothed rack (16), a plurality of piston/cylinder units/continuous linear motion motors (64, 66, 68, 70) for the toothed rack, each of the plurality of piston/cylinder units having an extendable and retractable piston and the units begin pivotally (84, 86, 88, 90) attached and carried by the platform so their central axes are pivoted through a small angle for engagement and disengagement of the toothed rack engagement members, a toothed rack engagement member (100') driven by its piston, a plurality of engagement/disengagement means (102') for engaging and disengaging the toothed rack engagement members, a source of hydraulic pressure for driving the pistons of the plurality of piston/cylinder units in order to provide a continuous relative motion between the platform and supporting leg by operating a portion of the engagement/disengagement means and the toothed rack engagement member of the piston/cylinder unit with alternate movement of the pair of the piston/cylinder units (64, 66, 68, 70), the plurality of engaged angled planar engagement surfaces of the toothed rack engagement members and the toothed rack generate in their engagement for resisting disengagement of the toothed rack engagement members from the toothed racks with the pistons in their retracted positions and force assisting disengagement of the toothed rack engagement members from the toothed rack with the pistons of the units fully extended as depicted in Figs. 8-10, the system being effected by a control operating the piston/cylinder units and engagement/disengagement members to provide a jack up cycle, jack down cycle and position locking cycle and the teeth of the rack and engagement members have a tooth pitch and

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inherently, the vertical travel of the toothed rack engagement members is the tooth pitch multiplied by the number of the engagement members and the vertical distance between the pivotal attachments of the piston/cylinder units is less than the vertical travel distance by one pitch distance (see col.3, lines 54-68; col.4, lines 1-11; col.5, lines 16-68; col.6, lines 1-11).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 30 and 32-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillis (US 4,655,640) in view of Shear et al (US 6,231,269).

Gillis discloses a jacking system for raising and lowering a working platform comprising of: a supporting leg (12) having at least one leg chord with at least one toothed rack (16), a plurality of piston/cylinder units/continuous linear motion motors (64, 66, 68, 70) for the toothed rack, each of the plurality of piston/cylinder units having an extendable and retractable piston and the units begin pivotally (84, 86, 88, 90) attached and carried by the platform so their central axes are pivoted through a small angle for engagement and disengagement of the toothed rack engagement members, a toothed rack engagement member (100') driven by its piston, a plurality of engagement/disengagement means (102') for engaging and disengaging the toothed rack engagement members, a source of hydraulic pressure for driving the pistons of the plurality of

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piston/cylinder units in order to provide a continuous relative motion between the platform and supporting leg by operating a portion of the engagement/disengagement means and the toothed rack engagement member of the piston/cylinder unit with alternate movement of the pair of the piston/cylinder units (64, 66, 68, 70), the plurality of engaged angled planar engagement surfaces of the toothed rack engagement members and the toothed rack generate in their engagement for resisting disengagement of the toothed rack engagement members from the toothed racks with the pistons in their retracted positions and force assisting disengagement of the toothed rack engagement members from the toothed rack with the pistons of the units fully extended as depicted in Figs. 8-10, the system being effected by a control operating the piston/cylinder units and engagement/disengagement members to provide a jack up cycle, jack down cycle and position locking cycle and the teeth of the rack and engagement members have a tooth pitch and inherently, the vertical travel of the toothed rack engagement members is the tooth pitch multiplied by the number of the engagement members and the vertical distance between the pivotal attachments of the piston/cylinder units is less than the vertical travel distance by one pitch distance (see col.3, lines 54-68; col.4, lines 1-11; col.5, lines 16-68; col.6, lines 1-11).

However, Gillis fails to disclose or fairly suggest the working platform being a marine-based or offshore platform. Shear et al discloses an apparatus for releasing a rack chock of a jack-up rig comprising of a offshore jack-up drilling rig with a mechanism for raising or lowering the support legs as depicted in Fig.1 (see col.2, lines 51-67; col.3, lines 1-61).

Therefore, in view of Shear et al, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the working platform to the

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offshore/marine-based jack mobile platform in order to use it in the exploration and extraction for petroleum deposit in the subsea bed.

With respect to the dimensions of angles of the planar upper and lower engagement surfaces, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to vary the angle dimensions of the engagement surfaces in order to improve the smooth and continuous mobilization of the supporting legs.

Obviousness-Type Double Patenting

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claims 30-49 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6,652,194 in view of Choate et al (US 6,076,996).

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Although the conflicting claims are not identical, they are not patentably distinct from each other because the present claimed invention is almost identical to the recitation of the '194 Patent except the platform and supporting leg details, for example, in claim 31 of present claimed invention and claim 1 of '194 Patent, the Applicants claim:

“a mobile, marine-based platform, a plurality of supporting legs for the mobile marine-based platform,....including a log chord comprising a column with a toothed rack welded on one side of the column....the means providing a relative motion between the mobile, marine based platform and the plurality of supporting legs.....each continuous linear motion motor comprising at least three piston/cylinder units,....”

Whereas in '194 Patent, the Applicants claim “at least three piston/cylinder units....control means for operating said at least three piston/cylinder units.....said control means providing a continuous relative motion between the MODU platform and the MODU supporting legs.....” (see col.15, lines 39-60).

Further, the '194 Patent fails to specifically disclose the detailed platform with leg structure such as, the supporting leg and a toothed rack attached to the supporting leg with welding and secured to the platform, in the body of the claims. Choate et al. discloses an offshore jack-up hull-to-leg load transfer device comprising of a mobile, marine-based, jack-up drilling platform (3) having a plurality of supporting legs (6) including a toothed rack (8) attached to the supporting column/legs by inherently welding, control mechanism (5) providing lowering or raising the platform with respect to the supporting legs (see Figs. 1-15; col.8, lines 51-67; col.9, lines 1-53).

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Therefore, in view of Choate et al, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the detailed platform structure to the '194 Patent in order to use the jack-up platform with continuous linear motion device being operated with the supporting leg of the platform structure.

With respect to the dimensions of angles of the planar upper and lower engagement surfaces as to claims 34 and 35, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to vary the angle dimensions of the engagement surfaces in order to improve the smooth and continuous mobilization of the supporting legs.

13. The obviousness-Type double patenting rejection is based on a judicially created doctrine grounded in public policy is primarily intended to prevent the prolongation of the patent term by prohibiting claims in a second patent not patentably distinct from claims in a first patent. *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(b) would overcome an actual or provisional rejection on this ground provided the conflicting application of patent is shown to be commonly owned with this application. See 37 C.F.R. 1.130 (b).

Allowable Subject Matter

14. Claims 31 and 38-49 would be allowable over the prior art of record upon timely filing Terminal Disclaimer.

Conclusion

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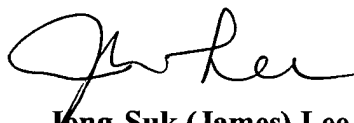
15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Other cited references disclose a jack-up platform apparatus with a chock assembly and leg holding device for the platform.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jong-Suk (James) Lee whose telephone number is (703) 308-6777. The examiner can normally be reached on 6:30 am to 3:00 pm, Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather C. Shackelford, can be reached on (703) 308-2978. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

J. Lee /jjl
September 30, 2004



Jong-Suk (James) Lee
Primary Examiner
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